#### **DIRECT TESTIMONY**

of

Mike Luth Rate Analyst

Rates Department Financial Analysis Division Illinois Commerce Commission

Reconciliation of Revenues Collected under Gas Adjustment Charges with Actual Costs Prudently Incurred

Mid American Energy Company

**Docket No. 01-0703** 

August 12, 2002

#### Witness Identification

- 1 Q. Please state your name and business address.
- 2 A. Mike Luth, Illinois Commerce Commission ("Commission"), 527 East Capitol
- 3 Avenue, Springfield, Illinois 62701.
- 4 Q. What are your present responsibilities with the Commission?
- 5 A. I am currently a Rate Analyst in the Rates Department of the Financial Analysis
- 6 Division. In that position, I review and analyze tariff filings by electric and gas
- 7 utilities with regard to cost of service and rate design. I make recommendations
- 8 to the Commission on such filings and participate in docketed proceedings as
- 9 assigned. In this docket, I evaluated the therms and charges billed to Cordova
- 10 Energy Center ("Cordova"), an affiliate of MidAmerican Energy Company ("MEC"
- or the "Company").
- 12 Q. Please state your professional qualifications and work experience.
- 13 A. I received a B.S. in Accounting from Illinois State University. I have earned the
- 14 C.P.A and C.M.A professional designations. Since graduating, I have worked as
- an Assistant Property Manager with a real estate company and as a Field Auditor
- with the Wisconsin Department of Revenue. In October of 1990, I joined the
- Accounting Department of the Commission. In June 1998, I transferred from the
- Accounting Department of the Commission to the Rates Department.
- 19 Q. Have you testified in any previous Commission dockets?

20 A. Yes. I have testified on numerous occasions before the Commission.

## Introduction to Testimony

- 21 Q. What is the subject matter of your testimony?
- 22 A. My testimony presents the results of my analysis of the therms and rates billed to
- Cordova during the Purchased Gas Adjustment ("PGA") reconciliation year
- 24 ended December 31, 2001.
- 25 Q. Are you sponsoring any schedules as part of your testimony?
- 26 A. Yes, I am sponsoring the following schedule:

Schedule 1 Analysis of Daily Imbalances at Cordova Energy Center

- 27 Q. Please summarize your findings.
- 28 A. MEC did not bill its affiliate Cordova for considerable Rider 8 Imbalance Charges
- 29 during the year 2001. Until June 20<sup>th</sup>, 2001, Cordova was not billed for any Rider
- 30 8 Imbalance Charges. After June 20<sup>th</sup>, Cordova was not billed 10¢ per therm for
- daily imbalances exceeding 20% of the volume delivered on several occasions.
- Had Cordova been billed for all applicable Rider 8 Imbalance Charges, gas costs
- recoverable under the PGA for other customers would have been reduced
- 34 because Rider 8 revenues reduce those costs.

- 35 Q. Describe Cordova's relationship to MEC.
- 36 Α. Cordova is an affiliate of MEC that uses the MEC gas distribution system to 37 receive natural gas as fuel for generation of electricity. Cordova is a tariff 38 contract customer (MEC III. C.C. No. 2, First Revised Sheet No. 9, Original Sheet 39 Nos. 9.01 through 9.18) that pays considerably less per therm for gas distribution 40 than base rate MEC customers. Cordova was billed a total of \$190,290.28 for 41 gas delivery in 2001, which averages out to approximately 44 one-hundredths of 1¢ per therm for the 43,179,980 therms delivered. As a base rate, off-peak MEC 42 43 Rate 87 customer, Cordova would have paid \$1,715,434.01 for the same volume 44 of gas delivered – approximately 3.97¢ per therm – nearly nine times more than 45 under its contract with MEC.
- 46 Q. Please describe MEC's Rider 8.
- 47 Α. Rider 8 is applicable to gas transportation customers who have more gas 48 delivered to the MEC system than the volume that a given transportation 49 customer requires on a given day, or who consume more gas on a given day 50 than is delivered to the MEC distribution system. Both of these conditions create 51 an imbalance, which is the difference between the amount of gas received by the 52 utility on behalf of the transportation customer and the amount used by the 53 customer. Gas transportation customers arrange for their own gas supplies to be 54 delivered to the Company's distribution system and are not subject to the full 55 PGA, unlike sales customers, who have their gas supplies arranged by MEC. 56 Rider 8 is applied at the rate of 1¢ per therm if the imbalance on a non-critical

57		day exceeds 10% of the volume delivered on behalf of the customer to the MEC
58		system, up to 20% of the volume delivered. Imbalances above 20% on a non-
59		critical day result in Rider 8 being applied at the rate of 10¢ per therm above the
60		20% minimum. Rider 8 does not apply to imbalances of zero to 10%.
61	Q.	Does MEC have any latitude to waive Rider 8?
62	A.	The Company's rules for gas transportation customers, as described under
63		MEC's Rider 7, allow MEC to waive Rider 8 under certain circumstances.
64		Second Revised Sheet No. 16.90 under the section entitled Waiver of Penalties
65		states that:
66 67 68 69 70 71 72 73 74 75		Regardless of Customer circumstances, the Company will not waive interstate pipeline imbalance charges that are incurred due to a customer imbalance. However, in the event of unanticipated, non-recurring conditions experienced by the Customer with their natural gas fueled equipment where the Customer as a result of problems with its natural gas fueled equipment was unable to use all quantities of gas confirmed for delivery (excluding changes in production levels by the Customer), the Company may waive its daily imbalance charges for the gas day the condition initially occurred.  Any imbalance charge paid by the Customer or waived by the Company, shall not be construed as giving the Customer the right to continue to create an imbalance on the system.
79	Q.	Has the Company explained why it waived substantial Rider 8 charges
80		to Cordova in the year 2001?
81	A.	The Company waived Rider 8 charges to Cordova for two reasons. The first
82		reason was that Cordova was in start-up phase prior to June 20 <sup>th</sup> , 2001, resulting
83		in gas usage that was intermittent, as explained by the Company in its reply to

Commission staff ("Staff") data request ML-2. The Company stated that it "tries to work with customers during the start up phase and may waive imbalance and related charges as long as the customer is conscientiously trying to deliver the amount of supply they actually use and there is no detrimental impact on the MEC system from this waiver."

The second reason was that Cordova had problems with its natural gas fueled equipment and was unable to burn the gas supply that was delivered to the MEC system on behalf of Cordova on several days in July and November 2001. In the Company's reply to Staff data request ML-3, the Company considered these problems to be different events of Force Majeure and reduced 10¢ per therm Rider 8 charges to 1¢ per therm charges. The Company witness who prepared the reply to Staff data request ML-3, Mr. Tom Gesell, explained that as a result of difficulties with pilot nozzles, the Cordova turbines were shut down and repairs were completed by contractor Siemens Westinghouse.

- Q. Has the Company demonstrated that Cordova's oversupplies do not cause harm to the MEC gas distribution system?
- 100 A. No, it has not. Harm can be defined in different ways, ranging from destruction of
  101 distribution system components to extra costs that must be paid by other
  102 customers who did not cause imbalances. The Company has not explained what
  103 happens to the excess gas that it receives on behalf of its affiliate Cordova. At
  104 the end of a month where positive imbalances outweigh negative imbalances, the

Company cashes out, or pays, the transportation customer for the imbalance.

Cordova's oversupply problems then become MEC's problems. If the cashed out

Cordova oversupply imbalances displace lower-priced alternatives for storage or

immediate use within the MEC system, PGA customers who receive their gas

supply from MEC will most likely pay the difference. If that scenario were to

occur, PGA customers would be harmed in the form of higher gas costs.

- 111 Q. What was the amount that MEC cashed out for, or paid to, Cordova in 2001?
- 112 Α. A review of Staff Cross Exhibit 2 from MEC gas rate Docket No. 01-0696 113 indicates that MEC paid Cordova a net of \$2,415,884 in cash-out imbalances 114 totaling a net of 5,769,602 therms. Given those amounts, Staff considers it 115 necessary for MEC to demonstrate that PGA customers did not subsidize 116 Cordova's start up and outage related oversupply. If the Cordova cash-out 117 volumes displaced lower-priced alternatives for PGA customers, PGA customers 118 would be subsidizing Cordova's inability to match its gas supply with its actual 119 use.
- 120 Q. Please explain Schedule 1, Analysis of Daily Imbalances at Cordova Energy121 Center.
- A. Schedule 1 is a 12-page schedule that reviews the daily imbalances at Cordova during the months of February through December 2001. Page 1 is a summary page of the sum of the daily 1¢ per the rm imbalance penalties for each month from February through December, the sum of the additional daily 9¢ per therm

Rider 8 charge that results in a combined 10¢ per therm each month, the combined amount of 1¢ and 10¢ per therm Rider 8 charges for each month, the amount billed to Cordova by MEC under Rider 8 each month, and the net Rider 8 amount waived each month.

Pages 2 through 12 show the daily gas receipts on behalf of Cordova, the daily imbalance at Cordova, the 10% daily imbalance not subject to Rider 8, the maximum 20% of therms received daily that are subject to the 1¢ per therm Rider 8 charge, the daily Rider 8 1¢ per therm charges, if any, and the additional 9¢ per therm Rider 8 charges, if any, that result in a total of 10¢ per therm Rider 8 charges.

- Q. How do the waived Rider 8 charges impact the Order in this docket?
- 137 A. Since Rider 8 revenues reduce gas costs recoverable under the PGA, it appears
  138 that MEC increased the gas costs recoverable under the PGA from other
  139 customers when it waived Rider 8 charges to Cordova. Unless the Company can
  140 demonstrate that the Cordova oversupply cash-outs did not result in higher gas
  141 costs for PGA customers, the Commission should order MEC to refund the
  142 waived Rider 8 charges through Factor O of the first monthly PGA filed after the
  143 final order in this docket.
- 144 Q. Does this conclude your direct testimony?
- 145 A. Yes, it does.

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Docket No. 01-0703 ICC Staff Exhibit 3.00 Schedule 1 Page 1 of 12

# MidAmerican Energy Company Analysis of Daily Imbalances at Cordova Energy Center - Summary of Pages 2 through 12 For the PGA Reconciliation year ended December 31, 2001

		Additional	Combined Billable	Rider 8	Net Rider 8
	<u>1-cent</u>	<u>9-cent</u>	Rider 8	<u>Billed</u>	<u>Waived</u>
January					
February	\$ 89.83	\$ 506.36	\$ 596.18	\$ -	\$ 596.18
March	\$ 708.24	\$ 8,637.01	\$ 9,345.25	\$ -	\$ 9,345.25
April	\$ 3,594.88	\$ 27,376.49	\$ 30,971.37	\$ -	\$ 30,971.37
May	\$38,944.37	\$290,991.73	\$329,936.10	\$ -	\$329,936.10
June	\$24,113.38	\$162,048.67	\$186,162.06	\$ 2,846.53	\$183,315.53
July	\$ 5,206.15	\$ 37,230.66	\$ 42,436.81	\$19,054.35	\$ 23,382.46
August	\$ 244.03	\$ 706.59	\$ 950.62	\$ 299.28	\$ 651.34
September	\$ 308.72	\$ 2,067.21	\$ 2,375.93	\$ 2,016.55	\$ 359.38
October	\$ 77.39	\$ 619.15	\$ 696.53	\$ 619.18	\$ 77.35
November	\$ 2,378.28	\$ 14,168.70	\$ 16,546.98	\$ 3,530.99	\$ 13,015.99
December	\$ 729.64	\$ 2,334.37	\$ 3,064.01	\$ 1,851.19	\$ 1,212.82
	<b>#</b> 70 004 00	Φ.Ε.Ι.Ο.Ο.Ο.Ο.Ο.Ο.Ο.Ο.Ο.Ο.Ο.Ο.Ο.Ο.Ο.Ο.Ο.Ο	<b>\$</b>	Φοο ο 4 ο ο 7	Φ.500.000.70
	<u>\$76,394.90</u>	<u>\$546,686.93</u>	\$623,081.83	<u>\$30,218.07</u>	\$592,863.76

	Volume to Customer	<u>Imbalance</u>	10% Free Tolerance	10 to 20% 1-cent Rider 8 <u>Maximum</u>		1-cent Rider 8	,	Additional 9-cent <u>Rider 8</u>
February 1, 2001	999	220	100	200	\$	1.20	\$	1.82
February 2, 2001	999	373	100	200	\$	2.73	\$	15.59
February 3, 2001	799	156	80	160	\$	0.76		
February 4, 2001	799	37	80	160				
February 5, 2001	799	278	80	160	\$	1.98	\$	10.64
February 6, 2001	999	88	100	200				
February 7, 2001	999	95	100	200				
February 8, 2001	999	369	100	200	\$	2.69	\$	15.23
February 9, 2001	999	17	100	200				
February 10, 2001	999	271	100	200	\$	1.71	\$	6.41
February 11, 2001	999	190	100	200	\$	0.90		
February 12, 2001	999	115	100	200	\$	0.15		
February 13, 2001	799	24	80	160				
February 14, 2001	899	56	90	180				
February 15, 2001	999	34	100	200				
February 16, 2001	1,249	101	125	250				
February 17, 2001	899	259	90	180	\$	1.69	\$	7.13
February 18, 2001	20,879	8,270	2,088	4,176	\$	61.82	\$	368.48
February 19, 2001	899	5	90	180				
February 20, 2001	899	310	90	180	\$	2.20	\$	11.72
February 21, 2001	1,249	30	125	250				
February 22, 2001	1,249	62	125	250				
February 23, 2001	1,249	70	125	250				
February 24, 2001	1,249	243	125	250	\$	1.18		
February 25, 2001	1,249	101	125	250				
February 26, 2001	1,249	253	125	250	\$	1.28	\$	0.29
February 27, 2001	1,249	91	125	250				
February 28, 2001	1,848	1,137	185	370	\$	9.52	\$	69.07
					Φ.	00.00	Φ.	500.00
					\$	89.83	\$	<u>506.36</u>

	Volume to Customer	<u>Imbalance</u>	10% Free Tolerance	10 to 20% 1-cent Rider 8 <u>Maximum</u>	1-cent <u>Rider 8</u>	A	additional 9-cent <u>Rider 8</u>
March 1, 2001	999	164	100	200	\$ 0.64		
March 2, 2001	1,598	997	160	320	\$ 8.37	\$	60.97
March 3, 2001	999	235	100	200	\$ 1.35	\$	3.17
March 4, 2001	999	276	100	200	\$ 1.76	\$	6.86
March 5, 2001	999	4,254	100	200	\$ 41.54	\$	364.88
March 6, 2001	999	2,341	100	200	\$ 22.41	\$	192.71
March 7, 2001	799	148	80	160	\$ 0.68		
March 8, 2001	799	204	80	160	\$ 1.24	\$	3.98
March 9, 2001	599	599	60	120	\$ 5.39	\$	43.13
March 10, 2001	599	599	60	120	\$ 5.39	\$	43.13
March 11, 2001	599	568	60	120	\$ 5.08	\$	40.34
March 12, 2001	599	599	60	120	\$ 5.39	\$	43.13
March 13, 2001	500	101	50	100	\$ 0.51	\$	0.09
March 14, 2001	100	297	10	20	\$ 2.87	\$	24.93
March 15, 2001	100	490	10	20	\$ 4.80	\$	42.30
March 16, 2001	500	141	50	100	\$ 0.91	\$	3.69
March 17, 2001	500	131	50	100	\$ 0.81	\$	2.79
March 18, 2001	500	111	50	100	\$ 0.61	\$	0.99
March 19, 2001	500	202	50	100	\$ 1.52	\$	9.18
March 20, 2001	500	11	50	100			
March 21, 2001	2,498	1,653	250	500	\$ 14.03	\$	103.81
March 22, 2001	599	202	60	120	\$ 1.42	\$	7.40
March 23, 2001	14,985	14,344	1,499	2,997	\$ 128.46	\$	1,021.23
March 24, 2001	29,970	26,132	2,997	5,994	\$ 231.35	\$	1,812.42
March 25, 2001		916	-	-	\$ 9.16	\$	82.44
March 26, 2001		784	-	-	\$ 7.84	\$	70.56
March 27, 2001		500	152	-	\$ 3.48	\$	45.00
March 28, 2001		749	159	-	\$ 5.90	\$	67.41
March 29, 2001		500	52	-	\$ 4.48	\$	45.00
March 30, 2001		29,970	29,206	-	\$ 7.64	\$	2,697.30
March 31, 2001		19,980	1,660	-	\$ 183.20	\$	1,798.20
					\$ 708.24	\$	8,637.01

	Volume to Customer	<u>Imbalance</u>	10% Free Tolerance	10 to 20% 1-cent Rider 8 <u>Maximum</u>		1-cent <u>Rider 8</u>	A	Additional 9-cent <u>Rider 8</u>
April 1, 2001		478	-	-	\$	4.78	\$	43.02
April 2, 2001		549	-	-	\$	5.49	\$	49.41
April 3, 2001	500	398	50	100	\$	3.48	\$	26.82
April 4, 2001	899	889	90	180	\$	7.99	\$	63.83
April 5, 2001	899	17,163	90	180	\$	170.73	\$	1,528.49
April 6, 2001	899	848	90	180	\$	7.58	\$	60.14
April 7, 2001	400	329	40	80	\$	2.89	\$	22.41
April 8, 2001	400	349	40	80	\$	3.09	\$	24.21
April 9, 2001	49,950	46,689	4,995	9,990	\$	416.94	\$	3,302.91
April 10, 2001	49,451	14,364	4,945	9,890	\$	94.19	\$	402.64
April 11, 2001	59,241	58,092	5,924	11,848	\$	521.68	\$	4,161.94
April 12, 2001	59,241	58,997	5,924	11,848	\$	530.73	\$	4,243.39
April 13, 2001	59,940	36,142	5,994	11,988	\$	301.48	\$	2,173.86
April 14, 2001	59,940	31,515	5,994	11,988	\$	255.21	\$	1,757.43
April 15, 2001	59,940	19,026	5,994	11,988	\$	130.32	\$	633.42
April 16, 2001	59,940	468	5,994	11,988				
April 17, 2001	999	307	100	200	\$	2.07	\$	9.65
April 18, 2001	500	114	50	100	\$	0.64	\$	1.26
April 19, 2001		214	-	-	\$	2.14	\$	19.26
April 20, 2001		51	-	-	\$	0.51	\$	4.59
April 21, 2001		71	-	-	\$	0.71	\$	6.39
April 22, 2001	29,970	29,868	2,997	5,994	\$	268.71	\$	2,148.66
April 23, 2001	44,955	44,569	4,496	8,991	\$	400.74	\$	3,202.02
April 24, 2001	39,960	3,918	3,996	7,992				
April 25, 2001	39,960	20,373	3,996	7,992	\$	163.77	\$	1,114.29
April 26, 2001	77,922	4,962	7,792	15,584				
April 27, 2001	34,965	33,327	3,497	6,993	\$	298.31	\$	2,370.06
April 28, 2001		20	-	-	\$	0.20	\$	1.80
April 29, 2001		31	-	-	\$	0.31	\$	2.79
April 30, 2001		20	-	-	\$	0.20	\$	1.80
					<u>\$</u>	3,594.88	<u>\$</u>	27,376.49

	Volume to Customer	<u>Imbalance</u>	10% Free Tolerance	10 to 20% 1-cent Rider 8 <u>Maximum</u>	1-cent <u>Rider 8</u>	,	Additional 9-cent <u>Rider 8</u>
May 1, 2001		30	-	-	\$ 0.30	\$	2.70
May 2, 2001		30	-	-	\$ 0.30	\$	2.70
May 3, 2001			-	-			
May 4, 2001			-	-			
May 5, 2001			-	-			
May 6, 2001			-	-			
May 7, 2001			-	-			
May 8, 2001	2,697		270	539			
May 9, 2001	4,995	4,540	500	999	\$ 40.41	\$	318.69
May 10, 2001	4,995	4,652	500	999	\$ 41.53	\$	328.77
May 11, 2001	2,997	2,068	300	599	\$ 17.68	\$	132.17
May 12, 2001	2,997	2,815	300	599	\$ 25.15	\$	199.40
May 13, 2001	2,997	2,108	300	599	\$ 18.08	\$	135.77
May 14, 2001	212,787	212,787	21,279	42,557	\$ 1,915.08	\$	15,320.66
May 15, 2001	99,900	99,900	9,990	19,980	\$ 899.10	\$	7,192.80
May 16, 2001	99,900	84,942	9,990	19,980	\$ 749.52	\$	5,846.58
May 17, 2001	509,490	368,757	50,949	101,898	\$ 3,178.08	\$	24,017.31
May 18, 2001	99,900	235,460	9,990	19,980	\$ 2,254.70	\$	19,393.20
May 19, 2001	599,400	304,571	59,940	119,880	\$ 2,446.31	\$	16,622.19
May 20, 2001	599,400	409,520	59,940	119,880	\$ 3,495.80	\$	26,067.60
May 21, 2001	599,400	592,825	59,940	119,880	\$ 5,328.85	\$	42,565.05
May 22, 2001	249,750	243,589	24,975	49,950	\$ 2,186.14	\$	17,427.51
May 23, 2001	499,500	392,581	49,950	99,900	\$ 3,426.31	\$	26,341.29
May 24, 2001	499,810	302,315	49,981	99,962	\$ 2,523.34	\$	18,211.77
May 25, 2001	599,400	497,956	59,940	119,880	\$ 4,380.16	\$	34,026.84
May 26, 2001	399,600	52,574	39,960	79,920	\$ 126.14		
May 27, 2001	399,600	136,677	39,960	79,920	\$ 967.17	\$	5,108.13
May 28, 2001	399,600	258,018	39,960	79,920	\$ 2,180.58	\$	16,028.82
May 29, 2001	399,600	113,073	39,960	79,920	\$ 731.13	\$	2,983.77
May 30, 2001	299,700	27,894	29,970	59,940			
May 31, 2001	599,400	261,191	59,940	119,880	\$ 2,012.51	\$	12,717.99
					\$ 38,944.37	\$2	290,991.73

	Volume to Customer	<u>Imbalance</u>	10% Free Tolerance	10 to 20% 1-cent Rider 8 <u>Maximum</u>	1-cent Rider 8	,	Additional 9-cent <u>Rider 8</u>
June 1, 2001	599,400	595,990	59,940	119,880	\$ 5,360.50	\$	42,849.90
June 2, 2001		41,349	-	-	\$ 413.49	\$	3,721.41
June 3, 2001		344,523	-	-	\$ 3,445.23	\$	31,007.07
June 4, 2001		74,484	-	-	\$ 744.84	\$	6,703.56
June 5, 2001	499,500	254,172	49,950	99,900	\$ 2,042.22	\$	13,884.48
June 6, 2001	499,500	184,409	49,950	99,900	\$ 1,344.59	\$	7,605.81
June 7, 2001	599,400	270,237	59,940	119,880	\$ 2,102.97	\$	13,532.13
June 8, 2001	399,600	110,833	39,960	79,920	\$ 708.73	\$	2,782.17
June 9, 2001	799,200	67,773	79,920	159,840			
June 10, 2001	799,200	70,659	79,920	159,840			
June 11, 2001	799,200	71,305	79,920	159,840			
June 12, 2001	799,200	275,191	79,920	159,840	\$ 1,952.71	\$	10,381.59
June 13, 2001	649,350	168,989	64,935	129,870	\$ 1,040.54	\$	3,520.71
June 14, 2001	649,350	239,212	64,935	129,870	\$ 1,742.77	\$	9,840.78
June 15, 2001			-	-			
June 16, 2001			-	-			
June 17, 2001			-	-			
June 18, 2001			-	-			
June 19, 2001			-	-			
June 20, 2001		40	-	-	\$ 0.40	\$	3.60
June 21, 2001		10	-	-	\$ 0.10	\$	0.90
June 22, 2001		101	-	-	\$ 1.01	\$	9.09
June 23, 2001			-	-			
June 24, 2001	44,955	42,681	4,496	8,991	\$ 381.86	\$	3,032.10
June 25, 2001	461,908	81,586	46,191	92,382	\$ 353.95		
June 26, 2001	387,692	40,354	38,769	77,538	\$ 15.85		
June 27, 2001	343,716	145,619	34,372	68,743	\$ 1,112.47	\$	6,918.82
June 28, 2001	336,633	100,043	33,663	67,327	\$ 663.80	\$	2,944.48
June 29, 2001	317,572	100,293	31,757	63,514	\$ 685.36	\$	3,310.07
June 30, 2001	157,382	5,985	15,738	31,476			
					\$ 24,113.38	<u>\$</u>	162,048.67

**\$** 5,206.15 **\$** 37,230.66

### MidAmerican Energy Company Analysis of Daily Imbalances at Cordova Energy Center For the PGA Reconciliation year ended December 31, 2001

July 2, 2001       135,880       22,486       13,588       27,176       \$ 88.98         July 3, 2001       7,310       2,268       731       1,462       \$ 15.37       \$ 72.5         July 4, 2001       7,073       2,501       707       1,415       \$ 17.94       \$ 97.7         July 5, 2001       54,815       1,547       5,482       10,963         July 6, 2001       150,469       14,549       15,047       30,094         July 7, 2001       87,043       11,573       8,704       17,409       \$ 28.69         July 8, 2001       40,260       158,522       4,026       8,052       \$ 1,544.96       \$ 13,542.3         July 9, 2001       250,869       30,165       25,087       50,174       \$ 50.78         July 10, 2001       263,856       7,504       26,386       52,771         July 11, 2001       277,242       6,530       27,724       55,448         July 12, 2001       247,502       2,549       24,750       49,500		Volume to Customer	<u>Imbalance</u>	10% Free Tolerance	10 to 20% 1-cent Rider 8 <u>Maximum</u>	1-cent Rider 8	,	Additional 9-cent <u>Rider 8</u>
July 2, 2001       135,880       22,486       13,588       27,176       \$ 88.98         July 3, 2001       7,310       2,268       731       1,462       \$ 15.37       \$ 72.5         July 4, 2001       7,073       2,501       707       1,415       \$ 17.94       \$ 97.7         July 5, 2001       54,815       1,547       5,482       10,963         July 6, 2001       150,469       14,549       15,047       30,094         July 7, 2001       87,043       11,573       8,704       17,409       \$ 28.69         July 8, 2001       40,260       158,522       4,026       8,052       \$ 1,544.96       \$ 13,542.3         July 9, 2001       250,869       30,165       25,087       50,174       \$ 50.78         July 10, 2001       263,856       7,504       26,386       52,771         July 11, 2001       277,242       6,530       27,724       55,448         July 12, 2001       247,502       2,549       24,750       49,500	July 1, 2001	2001 24,685	7,297	2,469	4,937	\$ 48.29	\$	212.40
July 4, 2001       7,073       2,501       707       1,415       \$ 17.94       \$ 97.70         July 5, 2001       54,815       1,547       5,482       10,963         July 6, 2001       150,469       14,549       15,047       30,094         July 7, 2001       87,043       11,573       8,704       17,409       \$ 28.69         July 8, 2001       40,260       158,522       4,026       8,052       \$ 1,544.96       \$ 13,542.30         July 9, 2001       250,869       30,165       25,087       50,174       \$ 50.78         July 10, 2001       263,856       7,504       26,386       52,771         July 11, 2001       277,242       6,530       27,724       55,448         July 12, 2001       247,502       2,549       24,750       49,500	July 2, 2001	2001 135,880	22,486	13,588	27,176	\$ 88.98		
July 5, 2001       54,815       1,547       5,482       10,963         July 6, 2001       150,469       14,549       15,047       30,094         July 7, 2001       87,043       11,573       8,704       17,409       \$ 28.69         July 8, 2001       40,260       158,522       4,026       8,052       \$ 1,544.96       \$ 13,542.3         July 9, 2001       250,869       30,165       25,087       50,174       \$ 50.78         July 10, 2001       263,856       7,504       26,386       52,771         July 11, 2001       277,242       6,530       27,724       55,448         July 12, 2001       247,502       2,549       24,750       49,500	July 3, 2001	, 2001 7,310	2,268	731	1,462	\$ 15.37	\$	72.54
July 6, 2001       150,469       14,549       15,047       30,094         July 7, 2001       87,043       11,573       8,704       17,409       \$ 28.69         July 8, 2001       40,260       158,522       4,026       8,052       \$ 1,544.96       \$ 13,542.3         July 9, 2001       250,869       30,165       25,087       50,174       \$ 50.78         July 10, 2001       263,856       7,504       26,386       52,771         July 11, 2001       277,242       6,530       27,724       55,448         July 12, 2001       247,502       2,549       24,750       49,500	July 4, 2001	, 2001 7,073	2,501	707	1,415	\$ 17.94	\$	97.78
July 7, 2001       87,043       11,573       8,704       17,409       \$ 28.69         July 8, 2001       40,260       158,522       4,026       8,052       \$ 1,544.96       \$ 13,542.3         July 9, 2001       250,869       30,165       25,087       50,174       \$ 50.78         July 10, 2001       263,856       7,504       26,386       52,771         July 11, 2001       277,242       6,530       27,724       55,448         July 12, 2001       247,502       2,549       24,750       49,500	July 5, 2001	2001 54,815	1,547	5,482	10,963			
July 8, 2001       40,260       158,522       4,026       8,052       \$ 1,544.96       \$ 13,542.3         July 9, 2001       250,869       30,165       25,087       50,174       \$ 50.78         July 10, 2001       263,856       7,504       26,386       52,771         July 11, 2001       277,242       6,530       27,724       55,448         July 12, 2001       247,502       2,549       24,750       49,500	July 6, 2001	2001 150,469	14,549	15,047	30,094			
July 9, 2001       250,869       30,165       25,087       50,174       \$ 50.78         July 10, 2001       263,856       7,504       26,386       52,771         July 11, 2001       277,242       6,530       27,724       55,448         July 12, 2001       247,502       2,549       24,750       49,500	July 7, 2001	2001 87,043	11,573	8,704	17,409	\$ 28.69		
July 10, 2001       263,856       7,504       26,386       52,771         July 11, 2001       277,242       6,530       27,724       55,448         July 12, 2001       247,502       2,549       24,750       49,500	July 8, 2001	, 2001 40,260	158,522	4,026	8,052	\$ 1,544.96	\$	13,542.30
July 11, 2001       277,242       6,530       27,724       55,448         July 12, 2001       247,502       2,549       24,750       49,500	July 9, 2001	250,869	30,165	25,087	50,174	\$ 50.78		
July 12, 2001 247,502 2,549 24,750 49,500	uly 10, 2001	, 2001 263,856	7,504	26,386	52,771			
	uly 11, 2001	, 2001 277,242	6,530	27,724	55,448			
July 13, 2001 181,708 38,251 18,171 36,342 \$ 200,80 \$ 171,8	uly 12, 2001	2001 247,502	2,549	24,750	49,500			
,	uly 13, 2001	, 2001 181,708	38,251	18,171	36,342	\$ 200.80	\$	171.85
July 14, 2001 376,643 9,471 37,664 75,329	uly 14, 2001	, 2001 376,643	9,471	,	75,329			
July 15, 2001 358,411 27,511 35,841 71,682	uly 15, 2001	, 2001 358,411	27,511	35,841	71,682			
July 16, 2001 519,160 28,791 51,916 103,832	uly 16, 2001	, 2001 519,160	28,791	51,916	103,832			
July 17, 2001 498,401 49,037 49,840 99,680	uly 17, 2001	, 2001 498,401	49,037	49,840	99,680			
July 18, 2001 554,615 30,854 55,462 110,923	uly 18, 2001	, 2001 554,615	30,854	55,462	110,923			
July 19, 2001 507,432 14,274 50,743 101,486	uly 19, 2001	, 2001 507,432	14,274	50,743	101,486			
July 20, 2001 503,036 14,913 50,304 100,607	uly 20, 2001	, 2001 503,036	14,913	50,304	100,607			
July 21, 2001 493,736 6,640 49,374 98,747	uly 21, 2001	, 2001 493,736	6,640	49,374	98,747			
July 22, 2001 272,337 19,278 27,234 54,467	uly 22, 2001	, 2001 272,337	19,278	27,234	54,467			
	uly 23, 2001				50,971			8,464.59
	uly 24, 2001	, 2001 3,017		302	603	\$ 6.81	\$	34.16
July 25, 2001 172,417 116,337 17,242 34,483 \$ 990.95 \$ 7,366.8	uly 25, 2001	, 2001 172,417	116,337	17,242	34,483	\$ 990.95	\$	7,366.82
July 26, 2001 234,315 10,691 23,432 46,863	•		•	·	·			
	uly 27, 2001		3,099	1,288	2,575	\$ 18.11	\$	47.12
July 28, 2001 208,112 12,361 20,811 41,622	•			20,811	·			
July 29, 2001 196,763 119,587 19,676 39,353 <u>\$ 999.11</u> <u>\$ 7,221.1</u>	uly 29, 2001	2001 196,763	119,587	19,676	39,353	\$ 999.11	\$	7,221.10
July 30, 2001 394,875 23,705 39,488 78,975	uly 30, 2001	2001 394,875	23,705	39,488	78,975			
July 31, 2001 490,279 5,699 49,028 98,056	uly 31, 2001	, 2001 490,279	5,699	49,028	98,056			

Source: MEC Reply to Staff data request ML-29, MEC Docket No. 01-0696, Staff Cross Exhibit 2

	Volume to Customer	Imbalance	10% Free Tolerance	10 to 20% 1-cent Rider 8 <u>Maximum</u>	1-cent Rider 8	Α	dditional 9-cent <u>Rider 8</u>
August 1, 2001	515,074	4,344	51,507	103,015			
August 2, 2001	499,600	20,203	49,960	99,920			
August 3, 2001	540,819	26,574	54,082	108,164			
August 4, 2001	498,381	1,960	49,838	99,676			
August 5, 2001	473,926	12,287	47,393	94,785			
August 6, 2001	645,893	17,660	64,589	129,179			
August 7, 2001	656,763	25,711	65,676	131,353			
August 8, 2001	604,425	4,203	60,443	120,885			
August 9, 2001	504,035	4,019	50,404	100,807			
August 10, 2001	400,030	10,865	40,003	80,006			
August 11, 2001	91,538	25,224	9,154	18,308	\$ 160.70	\$	622.48
August 12, 2001	72,447	611	7,245	14,489			
August 13, 2001	554,605	47,107	55,461	110,921			
August 14, 2001	378,221	13,824	37,822	75,644			
August 15, 2001	334,265	9,064	33,427	66,853			
August 16, 2001	205,974	11,699	20,597	41,195			
August 17, 2001	334,735	14,982	33,474	66,947			
August 18, 2001			-	-			
August 19, 2001	3,207	1,576	321	641	\$ 12.55	\$	84.11
August 20, 2001	217,352	24,018	21,735	43,470	\$ 22.83		
August 21, 2001	380,779	5,168	38,078	76,156			
August 22, 2001	501,198	3,730	50,120	100,240			
August 23, 2001	488,821	4,031	48,882	97,764			
August 24, 2001	420,080	7,472	42,008	84,016			
August 25, 2001	5,495	490	550	1,099			
August 26, 2001	43,187	134	4,319	8,637			
August 27, 2001	456,613	5,165	45,661	91,323			
August 28, 2001	458,131	2,836	45,813	91,626			
August 29, 2001	523,656	2,745	52,366	104,731			
August 30, 2001	432,977	48,092	43,298	86,595	\$ 47.94		
August 31, 2001	175,359	215	17,536	35,072			

\$ <u>244.03</u> <u>\$ 706.59</u>

<u>\$ 308.72</u> <u>\$ 2,067.21</u>

### MidAmerican Energy Company Analysis of Daily Imbalances at Cordova Energy Center For the PGA Reconciliation year ended December 31, 2001

	Volume to Customer	<u>Imbalance</u>	10% Free Tolerance	10 to 20% 1-cent Rider 8 <u>Maximum</u>		1-cent Rider 8	A	Additional 9-cent <u>Rider 8</u>
September 1, 2001	5,854	146	585	1,171				
September 2, 2001	6,034	26	603	1,207				
September 3, 2001	43,328	143	4,333	8,666				
September 4, 2001	368,601	6,947	36,860	73,720				
September 5, 2001	408,472	5,971	40,847	81,694				
September 6, 2001	382,497	39,591	38,250	76,499	\$	13.41		
September 7, 2001	408,082	12,584	40,808	81,616				
September 8, 2001	202,917	2,073	20,292	40,583				
September 9, 2001	38,032	8,841	3,803	7,606	\$	50.38	\$	111.11
September 10, 2001	240,130	1,150	24,013	48,026				
September 11, 2001	274,295	2,724	27,430	54,859				
September 12, 2001	2,947	2,962	295	589	\$	26.67	\$	213.53
September 13, 2001	5,524	459	552	1,105				
September 14, 2001	3,207	2,795	321	641	\$	24.74	\$	193.82
September 15, 2001	10	10	1	2	\$	0.09	\$	0.72
September 16, 2001			-	-				
September 17, 2001			-	-				
September 18, 2001			-	-				
September 19, 2001			-	-				
September 20, 2001			-	-				
September 21, 2001			-	-				
September 22, 2001			-	-				
September 23, 2001			-	-				
September 24, 2001		10	-	-	\$	0.10	\$	0.90
September 25, 2001		10	-	-	\$	0.10	\$	0.90
September 26, 2001		10	-	-	\$	0.10	\$	0.90
September 27, 2001	21,419	21,454	2,142	4,284	\$	193.12	\$	1,545.32
September 28, 2001	225,854	231	22,585	45,171				
September 29, 2001	6,773	11	677	1,355				
September 30, 2001	59,520	177	5,952	11,904				
					_		•	

	Volume to Customer	<u>Imbalance</u>	10% Free Tolerance	10 to 20% 1-cent Rider 8 <u>Maximum</u>	1-cent <u>Rider 8</u>		dditional 9-cent <u>Rider 8</u>
October 1, 2001	284,525	6	28,453	56,905			
October 2, 2001	288,680	2	28,868	57,736			
October 3, 2001	293,776	3	29,378	58,755			
October 4, 2001	284,665	6	28,467	56,933			
October 5, 2001	238,591	3	23,859	47,718			
October 6, 2001	6,184	6	618	1,237			
October 7, 2001	5,934	6	593	1,187			
October 8, 2001	749	3	75	150			
October 9, 2001	20		2	4			
October 10, 2001			-	-			
October 11, 2001	20		2	4			
October 12, 2001			-	-			
October 13, 2001	20		2	4			
October 14, 2001			-	-			
October 15, 2001	370	1	37	74			
October 16, 2001	46,414	5	4,641	9,283			
October 17, 2001	7,702	1	770	1,540			
October 18, 2001	46,314	3,365	4,631	9,263			
October 19, 2001	237,482	2	23,748	47,496			
October 20, 2001			-	-			
October 21, 2001			-	-			
October 22, 2001			-	-			
October 23, 2001	2,078	2	208	416			
October 24, 2001	3,217	3,212	322	643	\$ 28.90	\$	231.17
October 25, 2001	2,388	2,386	239	478	\$ 21.47	\$	171.76
October 26, 2001	160	171	16	32	\$ 1.55		12.51
October 27, 2001	1,309	1,299	131	262	\$ 11.68		93.35
October 28, 2001	1,409	1,409	141	282	\$ 12.68		101.45
October 29, 2001	110	121	11	22	\$ 1.10	\$	8.91
October 30, 2001	70		7	14			
October 31, 2001	260	1	26	52			
					\$ 77.39	\$	619.15
					-	_	

Source: MEC Reply to Staff data request ML-29, MEC Docket No. 01-0696, Staff Cross Exhibit 2

	Volume to Customer	<u>Imbalance</u>	10% Free Tolerance	10 to 20% 1-cent Rider 8 <u>Maximum</u>	1-cent <u>Rider 8</u>	,	Additional 9-cent <u>Rider 8</u>
November 1, 2001		20	-	-	\$ 0.20	\$	1.80
November 2, 2001		50	-	-	\$ 0.50	\$	4.50
November 3, 2001		40	-	-	\$ 0.40	\$	3.60
November 4, 2001		40	-	-	\$ 0.40	\$	3.60
November 5, 2001		30	-	-	\$ 0.30	\$	2.70
November 6, 2001	30,350	592	3,035	6,070			
November 7, 2001	183,197	43,215	18,320	36,639	\$ 248.95	\$	591.80
November 8, 2001	307,402	5,493	30,740	61,480			
November 9, 2001	159,780	13,057	15,978	31,956			
November 10, 2001	3,027	3,045	303	605	\$ 27.42	\$	219.56
November 11, 2001	40,290	3,548	4,029	8,058			
November 12, 2001	242,907	4,276	24,291	48,581			
November 13, 2001	171,129	163,153	17,113	34,226	\$ 1,460.40	\$	11,603.45
November 14, 2001	180,130	34,218	18,013	36,026	\$ 162.05		
November 15, 2001	425,744	888	42,574	85,149			
November 16, 2001	415,344	5,396	41,534	83,069			
November 17, 2001	5,874	102	587	1,175			
November 18, 2001	88,112	36,900	8,811	17,622	\$ 280.89	\$	1,734.98
November 19, 2001	427,872	14,852	42,787	85,574			
November 20, 2001	422,517	2,622	42,252	84,503			
November 21, 2001	171,998	14,905	17,200	34,400			
November 22, 2001	10		1	2			
November 23, 2001	10	10	1	2	\$ 0.09	\$	0.72
November 24, 2001	20	20	2	4	\$ 0.18	\$	1.44
November 25, 2001	20	10	2	4	\$ 0.08	\$	0.54
November 26, 2001	40,899	7,522	4,090	8,180	\$ 34.32		
November 27, 2001	355,444	42,831	35,544	71,089	\$ 72.87		
November 28, 2001	281,678	12,088	28,168	56,336			
November 29, 2001	246,064	4,301	24,606	49,213			
November 30, 2001	244,705	33,393	24,471	48,941	\$ 89.23		

<u>\$ 2,378.28</u> <u>\$ 14,168.70</u>

729.64 \$ 2,334.37

### MidAmerican Energy Company Analysis of Daily Imbalances at Cordova Energy Center For the PGA Reconciliation year ended December 31, 2001

	Volume to Customer	<u>Imbalance</u>	10% Free Tolerance	10 to 20% 1-cent Rider 8 <u>Maximum</u>	1-cent <u>Rider 8</u>	Þ	Additional 9-cent <u>Rider 8</u>
December 1, 2001	3,267	2,716	327	653	\$ 23.89	\$	185.63
December 2, 2001	74,006	2,984	7,401	14,801			
December 3, 2001	293,606	2,997	29,361	58,721			
December 4, 2001	280,359	18,861	28,036	56,072			
December 5, 2001	419,640	7,815	41,964	83,928			
December 6, 2001	407,982	10,364	40,798	81,596			
December 7, 2001	466,513	8,459	46,651	93,303			
December 8, 2001	188,811	47,584	18,881	37,762	\$ 287.03	\$	883.96
December 9, 2001	213,796	32,312	21,380	42,759	\$ 109.32		
December 10, 2001	244,565	19,336	24,457	48,913			
December 11, 2001	164,835	25,084	16,484	32,967	\$ 86.01		
December 12, 2001	9,021	3,008	902	1,804	\$ 21.06	\$	108.34
December 13, 2001	72,927	10,446	7,293	14,585	\$ 31.53		
December 14, 2001	236,953	10,529	23,695	47,391			
December 15, 2001	205,744	1,609	20,574	41,149			
December 16, 2001	122,987	13,553	12,299	24,597	\$ 12.54		
December 17, 2001	106,443	2,993	10,644	21,289			
December 18, 2001	7,003	1,006	700	1,401	\$ 3.06		
December 19, 2001	8,222	2,222	822	1,644	\$ 14.00	\$	51.98
December 20, 2001	4,266	1,739	427	853	\$ 13.12	\$	79.72
December 21, 2001	410	409	41	82	\$ 3.68	\$	29.43
December 22, 2001	2,288	2,304	229	458	\$ 20.75	\$	166.18
December 23, 2001	779	791	78	156	\$ 7.13	\$	57.17
December 24, 2001	2,068	2,055	207	414	\$ 18.48	\$	147.73
December 25, 2001	3,586	3,582	359	717	\$ 32.23	\$	257.83
December 26, 2001	3,067	3,065	307	613	\$ 27.58	\$	220.64
December 27, 2001	1,528	1,532	153	306	\$ 13.79	\$	110.38
December 28, 2001	490	491	49	98	\$ 4.42	\$	35.37
December 29, 2001			-	-	 		
December 30, 2001			-	-			
December 31, 2001			-	-			